

Articles

Limited Identities for a Common Identity: Archivists in the Twenty-First Century

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Résumé

Cet article porte sur l'évolution de la profession d'archiviste à l'«Âge de l'information». La première partie évoque les domaines propres et traditionnels des archivistes et, entre autres professionnels de l'information, des bibliothécaires. La seconde partie présente un survol du contexte sans précédent de l'Âge de l'information, lequel remet en question les approches disciplinaires restreintes. La troisième partie esquisse un tableau pour l'avenir avec ses contrecoups sur nos méthodes et notre rôle, sur les relations croissantes avec les autres professions, sur l'information et sa dissémination. Une identité de plus en plus large chez les archivistes émergera de nos propres identités limitées, à la fois à l'intérieur de la profession et, de plus en plus, par pollinisation croisée avec les professions parentes.

Abstract

This paper is about the evolution of the archival profession in the "Information Age." The first part provides a brief reminder of the specific and traditional realms of archivists and, among other information professions, librarians. The second section provides an overview of the unprecedented context of the "Information Age" challenging narrow disciplinary approaches. The third part sketches a vision for the future, with its impact on our practices and role, on our growing partnerships with other professions, on training, and on providing information to the public. A common identity for archivists will emerge from our own limited identities, both inside our profession and, more and more, through cross-pollination with kindred information professions.

"It is up to us to give shape to our culture"

George MacDonald

The 1995 Association of Canadian Archivists Conference encompassed a wide breadth and range of subjects: evidence in electronic records, standards, and the archivists' cultural role to legal, technical, and educational questions, the possible fading away of the "total archives" concept, and numerous partnerships--all of this in a timeframe extending from the recent past to the twenty-first century. This panoramic sweep combined with the extreme variety of archival institutions, in size and in holdings, helps to reveal the wide diversity and yet the many linkages in the archival community across Canada.

To characterize this diversity and oneness in the "information age," a metaphor inspired the title of this article. The expression "limited identities" was coined by J.M.S. Careless to characterize the Canadian experience over three and a half centuries. Canada did not evolve into a melted and relatively homogeneous nation with a single dominant culture and an integrated history binding the parts into a strong whole. Instead, different timeframes and layers of colonization by two different mother-countries, then later overlays of immigrants of many origins--and linked to these, differences in language, religion, ethnicity, culture, region, and social class--all coalesced to create limited identities: a primary loyalty to the part(s), a softer commitment to the whole. With time, however, this heterogeneity itself assumed a "national character," cementing the parts together where the melting pot approach would have failed. Through redistribution and some mechanism of reciprocity inside and outside the market place, bonds were weaved defining Canadians and succeeding until now in reconciling their "limited identities" (their separate regional lives) with a need for the larger whole, the Canadian nation, guaranteeing collective security and identity.¹

This article does not preach a single identity or a single role for archivists. Rather, it argues that a corporate or common professional identity will emerge from our own limited identities, both inside our profession and, more and more, through cross-pollination with kindred information professions. Colleagues work in small or big, private and public, corporate, university, municipal, provincial, or federal archives. Their training is diverse. Some must be separately or at once archivists, records managers, information analysts, conservators, professors of archival science, librarians or documentalists, even general administrators to their parent organizations. Archival institutions have developed varied mandates, and deal with textual or multimedia records. This context of diversity and flux points not towards a single rigid orthodoxy, but rather towards flexibility, openness, and interdisciplinarity well balanced by a core of distinctly professional principles such as provenance, context, and evidential value.²

The wisdom of probing the status of our profession at this time may be questionable. After all, its local roots are very recent, contrary to the situation in Europe. Our professional associations date only from the late 1960s and early 1970s; *Archivaria*, from 1975; our "rediscovery" (in the words of Tom Nesmith)³ of the core principles and concepts to guide our work, from the later 1970s; the first graduate programmes in archival science, from the 1980s. The vocal debates around the existence of an

autonomous archival profession, distinct from history and other disciplines; about its theoretical underpinnings, its strategies, and its procedures; about the need to standardize large segments of our work--all of these are very recent echoes, indeed active considerations still in our minds.

Both inside and outside the profession, however, some have already pointed to necessary adjustments and revisions, given the advancing waves of new information demands, technologies, professional alliances, and fiscal/economic realities, at the turn of a new millennium.⁴ Problems in the information field increasingly cross disciplinary borders. While we are trying to delineate and to meet better the memorial needs of the late twentieth century, we also have to face today the challenges of tomorrow: to cope with an information universe and a society fraught with relativism, instability, and constant change. We therefore need to migrate the core of our professional "Grail" into new time/societal spaces. Otherwise, we will become antiquarians, useful for the distant past, but irrelevant to the information revolution unfolding in front of our very eyes.⁵

The present article results from an on-going reflection, which may never materialize into a "final" view, as the ground, so to speak, is in motion. While it mentions regularly the experience of the National Archives inasmuch as it has relevance to the whole profession, the article tries to scan the entire landscape in which archival institutions must operate. For instance, in the wake of a growing trend in the private sector, the federal government articulated in 1994 its principles and policies of public service, in a *Blueprint* document. This vision proposes government services that are "affordable, accessible, and responsive" (the same objectives could apply to business or university services), preferably through a single point of access.⁶ At the same time, senior managers increasingly seem to care only about one thing in the realm of information management: that the right information be quickly retrievable, affordable, usable, accurate, and available for a multitude of uses, from preparing answers for the Minister to packaging information to be sold--and all of this preferably through a "single window" or source. Archivists need to grasp those realities if they expect to position themselves effectively.

My theme, then, relates to our archival destiny, to our limited identities and our partial perceptions, to the ways in which these must (may?) nonetheless now converge into a shared professional consensus for archives and archivists, a common or collective identity--while paradoxically, at the same time, we are entering into intellectual and practical partnerships with a wide range of other professions and thinkers. Although there are many possible partnerships, the example of archives and libraries is singled out as an illustration, for the sake of brevity and because of a long-standing cooperation/competition relationship.

The article is organized in three parts. First, it provides a brief reminder of the specific and traditional realms of archives and libraries. Other couplings could have been identified, but this particular one seems more salient to our information world. The second section provides an overview of the unprecedented context of the "Information Age" that is now shaking and challenging the conventional narrow disciplinary approaches. The third sketches a vision for the future, with its impacts on our practices and role, on our relationships (and growing partnerships) with other professions, on training, and on providing information to the public. The conclusion

reminds archivists of the complementary role of archives as both administrative arms of organizations (at least, for many of them) and as cultural institutions, a dual role that is being strengthened rather than suppressed by the present maelstrom.

Archives and Libraries, Archivists and Librarians

“Nothing exists without a context”

John le Carré

As a group, heritage institutions assemble the memory of whole nations and of the world. Archival repositories, however, gather the necessary documentary sources that nourish or enhance the understanding of other realities, be they artifactual or artistic. By their nature, archival repositories acquire, preserve, and make available public and/or private records of personal, institutional, local, provincial, regional, and national significance. Usually, these records incorporate a wide range of material. The *National Archives Act* (1987), for example, provides an extremely broad definition of the word “records,”⁷ reflecting the “total archives” concept adopted by this institution in the course of its history. Archivists also generally assist their parent body (generally, not only the National Archives) in managing its current information holdings, so as to support decision-making and eliminate records of no enduring value, while ensuring the permanent preservation of corporate memory and its information assets. Finally, some larger institutions are supporting the archival community.

Ultimately, archives constitute registries preserving the long-term memory of specific organizations, governments, or persons. They document decisions, actions, and transactions; programmes, structures, processes, and functions; the fundamental or more particular rights of groups and individuals; and the customs, practices, and different forces at work in society, and the persons who have contributed to shaping its evolution. In a democracy such as Canada, archives ensure the accountability of authorities of all kinds, by rendering their decision-making transparent to their stakeholders. They facilitate the functioning of organizations or governments by becoming involved in information management activities, the appraisal, storage, disposition, and retrieval of recorded and organic information (immediate memory). Archives are thus entrusted with the memory function and must intervene (directly, as in Europe and parts of Canada, or indirectly, in cooperation with records managers, as in most of Canada and the United States) at all the stages of the life continuum of records, from their inception to their final disposition. Ideally, no record should be destroyed without the archivist’s consent. Archivists are the specialists in the management of organizational (and sometimes personal) memory. In the end, they and the records enhance the knowledge that a society (an institution, etc.) has of itself, and thus of its identity.

Traditionally, archives deal with “l’information consignée et organique,”⁸ that is with recorded information or unique and original records organically generated by an organization (such as a government, a university, a company) or a person in the normal course of its or his/her activities for purposes linked to these. Archivists acquire and organize fonds, establish the context of their creation, describe the creator(s),

their structures and procedures, the functions themselves, the lines of authority, the links with related creators of other fonds, etc. In this sense, each individual record, even when of exceptional value, acquires its full importance in its relationships with other records and the context of its creation (the archival principle of provenance).⁹ In the end, depending on the archival repository and its acquisition practices, only a small proportion of the whole mass of records will be preserved, following a selection that is becoming more and more rigorous because of dwindling resources and the massive increase in the quantity of documentation.

Archivists consider first the value of records as evidence of the functions, activities, programmes, decisions, and transactions of the creators. This evidential yield is linked to provenance.¹⁰ Yet archivists do not restrict themselves to the narrow band of records reflecting the sponsor's activities, or those needed to reinforce various internal and public accountabilities and long-term operational needs. Associations, groups, and citizens in society interact with their institutions--whether these be governments, churches, universities, labour unions, or a myriad of other corporate creators, without mentioning families and circles of friends or colleagues. These records in the private sphere complement and supplement "official" or institutional archives. This other half of the "total archives" richness is Canada's particular pride. Archives in this way focus on the records of *governance* (not just of governments and other institutions), of social interactions whether horizontal or vertical, including the living links binding together families and communities.¹¹ In this way, the old "informational value" side of the archives is not neglected. It is achieved, however, not by chasing after records of interest to today's users or by using crystal balls to predict future use,¹² but by widening the scope and definition of provenance into this interactive contextuality of governance.

While archives deal with non-published recorded information (in the form of records), the libraries of Canada collect, preserve, and make available the published (traditionally printed) heritage of the nation, and manage extensive collections of publications, whether national or international, covering different realms of human endeavour. Libraries acquire published books, periodicals and other documents, films, videos, talking books, and, in larger libraries, historical and literary manuscript collections. They may contribute to the establishment of a national union catalogue or database of library holdings, allow for interlibrary-loans or reprography of works for distant access, and organize books or other published documentation according to some classification system relating to themes or areas of specialized knowledge.¹³

The National Library of Canada, for instance, accomplishes these tasks through the legal deposit system, the purchase of materials, the indexing and compiling of a national bibliography, and the provision of a national location service and interlibrary loans, the functioning of which depends on a central database of the holdings of the main libraries in the country and even outside Canada's borders. This database can be linked to international systems, thanks to common descriptive standards, interconnection between international and national databases, and exchanges between the national libraries of many countries.¹⁴

Libraries and librarians focus their attention first of all on the *content* of the *information*, not on the *context* of its creation--their classification systems are not based on provenance, but on subject matter--and they deal with information that is largely available to the public in numerous copies, i.e., that is published or near-published

(as with so-called “grey literature”). Thus the extensive use by librarians of computer systems, databanks, descriptive or cataloguing standards, networks, and the like, to distribute information as widely as possible. Finally, the words “books/documents” in the *National Library Act* (1969) comprise a very wide definition, similar to that of “records” in the *National Archives Act*, except that it is qualified by the adjective “published,” which is defined as “released in Canada for general distribution or sale”—also a broad definition.¹⁵

Of course, in practice, the line is not drawn that tightly. For instance, one could argue that libraries also deal with some form of context.¹⁶ Many archives are sub-programmes inside libraries (e.g., in many universities). Archival repositories may also include a research library, and many libraries acquire private or institutional fonds and, more often, collections. In the case of the National Archives and the National Library of Canada, for example, the National Archives acquires maps, including published ones, and has built up, through more than a century, a very important Canadiana collection. It also retains audio-visual records produced in Canada and deemed to be of national significance, recently through article eight of its law. The National Library, for its part, acquires literary manuscripts, musical scores, sound recordings with Canadian content, musicians’ papers, and, through a recent application of its *Act*, videos and CD-ROMs published in Canada. Also collected are CD-ROMs produced from government databases (in some cases where the National Archives acquires the raw data from the same system). These potentially overlapping mandates or the implementation of mandates, whether optimum or not,¹⁷ stem from long traditions, both national and international. After all, the Library of Congress, the British Library, and the Bibliothèque nationale de France have always assembled private archival records, while the national archives of these countries have tended to specialize in public/governmental/political records. This has not been the case in Canada, however, probably because the Public/National Archives was created very early, in 1872, while the National Library was established only in 1953, at a time when the concept of “total archives” was already well-embedded in Canadian traditions. The potential for duplication, however, particularly in the area of government information, is rapidly increasing, with the advent of new technologies that dissolve in part the lines between “published” and “unpublished” documents.

A Change in Context. The Advent of the Information Age

“Do not weep. Do not wax indignant. Understand.”

Spinoza

The information tidal wave swamping us is the result of extraordinary technological changes and of a new ethos towards public information—an informed citizen being essential for the development of the economy and for democracy and good governance.¹⁸ The combination of new technologies—automation, digitization, and information storage and retrieval systems—coupled with growing telecommunications capacities, including the Internet (and the soon to be information “highways” and “superhighways”),¹⁹ as well as the exponentially growing volume of information, has made more information more accessible to a larger number of users than ever before, in an ever-expanding variety of ways, and with ever-increasing speed. This

proliferation of communication vehicles and content is transforming the way Canadians--and citizens of many other countries--communicate with each other and with their social, economic, political, and cultural environment, and the ways in which they work, play, educate themselves, enlarge their culture, or enrich their leisure. A woman in Regina may now stroll through the Louvre on her desktop, a Halifax senior may glance at old fishing gear exhibited at the Museum of Civilization on his screen, or a Vancouver genealogist may identify and access the microfilm of the National Archives held at the University of British Columbia to track down his ancestors by querying an Ottawa database or a CD-ROM.

These developments, as they unfold, will continue to have major effects on archives, libraries, museums, documentation centres, and private as well as public information providers, well into the next century. Massive amounts of information are being created and made available electronically. Yet these information oceans are so large that the public will need navigational tools, maps, and charts to identify potential sources of needed information.²⁰

Technological leaps are propelling developed countries, including Canada, into the "information age," sometimes called the "network age." A radical alteration has occurred in the past five years in the way business is done and the manner in which records are generated and potentially preserved. We have left the age of "facts" and concrete physical realities for the universe of the "virtual," with the disappearance of hierarchical structures, the shift from vertical to horizontal thinking, and the move away from isolated organizational stovepipe cells to the use of project teams. At the same time, a convergence of information and policy issues has taken place across governments, businesses, and, of course, diverse professions. Archivists and librarians, records and information managers, data and computer technology professionals, many record-creators themselves, some users, auditors, programme evaluators, and legal experts, even museum and gallery curators,²¹ all share many concerns well beyond their professional walls. These issues include access to information and the protection of privacy, the Internet's impact and potential uses, copyright, coping with electronic records, the nature of a record, information as a corporate asset as well as cultural memory, user fees and revenue generation, appraisal,²² preservation, dissemination to wider audiences such as community outreach to schools and other publics, diminishing resources, and encouraging partnerships and ending redundancies of effort--to name only the most obvious.

While the dissemination of published and unpublished information is important, one of the major challenges facing modern organizations, as we shall see in more detail later, is the preservation of information in context through time. Moreover, the old definitions of "records" (recorded information) and of "publications" (books, published documents) apply less and less to the new forms of information created, massaged, reformatted, compound, complex,²³ often virtual, that are accumulating--or often being lost--and that are exchanged, circulated, and remanipulated in office automation and larger computer systems. These types of information can be considered at the same time as "records" and as "publications."

One of the major changes is the ability of information creators to reach their markets directly, without a "middle-man." How many scientific journals nowadays are available only in electronic form and through the Internet for a charge from the "pub-

lisher”? Such a change potentially eliminates the library as a source of such material because users can order their copies directly from the source, and can choose only those parts of the journal that they want. Thus the “journal” becomes, in reality, a theoretical construct, really a series of articles which may never exist as an actual collective “book” or entity.²⁴ Librarians’ role as information providers could change in a variety of ways. In the best scenario, they become involved as information brokers, helping users to retrieve, in the new context, the information commodities that they need to support a business decision, a research pursuit, etc. Here as in other cases, a host of questions such as charging for services, equity of access, privacy, and ability to pay come to the fore.

The same situation exists for the diffusion of some departmental--or business, university, etc.--records. There is a growing trend in government departments to make information directly available to the public through the Internet on Gophers, Web servers, etc., sometimes bypassing entirely the traditional publishing, collecting, and archival agencies. The possibility of generating significant revenue by such direct diffusion acts as an incentive in these hard times, and is a growing problem in terms of the orderly disposition of the Government’s electronic records. Departments are hardly thrilled by the prospect of transferring their data files to the National Archives or the National Library for subsequent free distribution while they (or their CD-ROM packages) are still generating thousands of dollars annually in revenue for the departments themselves. For archives, then, the challenges are much the same as for libraries, except worse. Departments and institutions of all kinds make use of electronic records in ever-increasing numbers, develop more and more on-line databases, and provide more and more direct access to these at source, often at a cost, leaving few traces of these actions and transactions, the evidence of which is supposed to be documented in records (and, eventually, archives).

The National Library has initiated a pilot study with a limited selection of electronic publications to try to find ways to collect and catalogue the “published” electronic output of the country. At present, it may not even be aware of the existence of some of those “publications” and archivists may well also be ignorant of their existence or consider them of short-lived value. As a result of these factors, an informal partnership of the National Library, Canada Communication Group (the government’s “publisher”), the Treasury Board, and the National Archives was established to find ways to coordinate the respective roles of each in controlling and tracking electronically distributed government information. Right now, it is impossible to provide taxpayers with an accurate accounting of existing sources and information products available inside the federal government. I doubt the situation is much different in most other Canadian institutions. Unless solutions are found, there will be corporate and national accountability (as well as memory) holes.²⁵

The issue of “grey literature,” that is, of so-called publications with limited reproduction,²⁶ is not new, of course. But in automated systems run by departments or institutions, in databanks, in flows and exchanges that link them to other networks in more and more complex combinations, where fragments are tailored into unpredictable forms and compounds, where the injection of one new piece of information or of a slight change triggers a chain-reaction all across a document or a databank,²⁷ this margin of uncertainty, a manageable problem before, threatens to embrace larger and larger segments of what, in former times and in other media, fell naturally in the

realm of records managers and archivists, on the one hand, or librarians and documentalists, on the other. The “unique” and “original” attributes of archival records are no longer valid in many cases, the copy being the same as the master and existing perhaps in a number of places. Provenance may sometimes be impossible to establish. Traditional definitions of “published” and “unpublished” have become blurred, challenging librarians and archivists, particularly those involved with government or institutional information, to clarify their fields of responsibility and, more and more it is to be hoped, of cooperation.²⁸

For instance, an important study of the Department of Human Resources Development may be considered an archival record for its evidential value. At the same time, it may circulate on CD-ROM or on the Internet and constitute a sort of “publication” inasmuch as it is available to a larger audience. A master version of one of the National Archives guides could be seen as the evidence or record of an accumulation of tasks that led to an approved guide, for instance the *Guide to the Management of Electronic Records*. Or it could be considered as the instrument that was used to make “x” copies for distribution or “publication” purposes.²⁹ The view or perspective that we bring to an object, such as a master version of an approved guide, may dictate what it is, but often it is both.³⁰

How do we identify, describe, index, and retrieve such “documents”? How do we avoid vain jurisdictional quarrels among professionals? Should archivists and librarians both take charge and/or develop coordination mechanisms? As for archivists, the additional challenge is not only the identification and preservation of the record, but the need to maintain also its integrity and provenance within an electronic environment. To paraphrase Terry Cook, this could be a hard byte to chew.³¹

For the first time in recorded memory, the three classic parts of a record—its structure, context, and content—are no longer integrated. These three elements were traditionally joined together physically on a single medium—clay tablet, parchment, paper, film. Now, with electronic records, structure, context, and content have been ripped asunder, existing in virtual reality only when recomposed by software intervention and only if appropriate signs and maps allow such recomposition to re-create a “record” rather than simply context-detached information.³² Yet such maps and signs, such functional requirements of record-keeping as opposed to information management, are only beginning to attract the attention of archivists and of individuals in organizations: thus the increased probability of vast holes in our memory.

Much has been written about electronic records and the challenges of acquiring, preserving, and making them available.³³ As Hans Rütimann, an International Programme Officer with the Washington-based Committee on Preservation and Access, recently stated in relation to libraries, technology has tightened the relationship between preservation and access. “We are now living in a digital world, in which we are moving from the management of material to the management of the process. The medium is relatively unimportant as we concentrate on the permanency of the information. In the digital world, preservation is access and access is preservation.”³⁴ Archivists would comment that if there is no sense of “recordness,” no sense of context or provenance rooting Rütimann’s information, then neither preservation nor access will amount to much. While Rütimann points out rightly that we have moved from focusing on the material to its processes, from the physical to the con-

ceptual, we must make sure that the contextual is not left behind.³⁵ In other words, a record remains recorded information, regardless of physical form, created, collected, or received in the initiation, conduct, and completion of an activity, and kept as evidence of such an activity, usually in a record-keeping system.³⁶ In addition, it must comprise sufficient content, context, and structure to enable it to serve as evidence or proof of a task, action, or transaction.³⁷

The new availability of information on the information highways also has an impact on users' expectations and requests. These individuals now have access to sources never previously available to them and they can communicate directly with issuing bodies and agencies: speed of access has become paramount, whether for business purposes or for research. They want information and they don't really care where they tap it from. Quibbles about who should do what appear to them as bureaucratic or professional turf wars.

Changes to the way information is made available, accessed, and used are also having effects on many traditional definitions, some of which have already been reflected in law. For instance, the North American Free Trade Agreement (NAFTA) contains provisions which required Canada to change the definition of "publication" in the Canadian *Copyright Act* to make it more flexible.³⁸ Similarly, the concept of "copy" is changing with the technology: the downloading of information from a network to a personal computer or simply looking at a computer screen may be considered as making and using a "copy." Arguments increase over such questions as whether a digitized image of a document is more than simply a copy. Archivists, librarians, and documentalists are often caught in the middle of these debates, risking infringement, trying to protect the integrity of the information.³⁹

Governments and businesses are themselves worried about some of the consequences of the explosive progress of technology. One of their major objectives is to re-engineer their operations and services, often, in the Canadian federal government at least, through the establishment of "single windows," designed to facilitate, enhance, or revolutionize the delivery of their services or the production of their goods. Increasingly, as these developments are implemented, organizations are becoming more and more concerned with the preservation of the information necessary to ensure the integrity of the programme, to document the actions of public servants or business managers (and their interactions with clients) so as to ensure accountability and corporate memory. Questions are being raised concerning how the relevant information is not only preserved, but is retrievable and useable as a corporate asset. How can the use of these technologies be maximized while meeting the requirements of numerous laws and regulations such as, in the federal government, the *National Archives Act*, the *National Library Act*, access to information, privacy, and copyright legislation, the Management of Government Information Holdings Policy, and of course the test of proof in law courts?

Over the past few years, networked information technology has been introduced into the offices of deputy ministers and senior executives. As they begin to face the challenges of managing electronic messages and documents in this environment, they are raising some fundamental questions: What is a record? What should they do with it? How can they retrieve it? How do they protect the legal accountability of their departments (or of their businesses) by having reliable, authentic evidence of

key functions, activities, and transactions?⁴⁰ They expect strategies to help their personnel identify and retrieve the needed records in order to accomplish their work. The absence of precise answers--and many of them have to be articulated by archivists and records managers--could lead to a rise in costs, to missed opportunities, to additional risks, to corporate amnesia, and, ultimately, for us all, to irrelevance. The good side to this is the heightened level of sensitivity: it means that we no longer have to sell the record-keeping question to senior managers. They already appreciate the issues and in fact are demanding answers. Archivists and records managers are in the best position to provide these, but they need to be at the table and they need to be equipped with answers that are relevant to the users' needs.

It is not as if no progress was being made. For instance, the International Council on Archives' Committee on Electronic Records, chaired by John McDonald, has developed a workplan to shape solutions that can be shared at the international level. In the federal government, the National Archives, through the Information Management Standards and Practices Division, has been involved in numerous partnerships with the Treasury Board and other departments, as well as the private sector, to find solutions. Tools and techniques for identifying and keeping records in a corporate systems environment are beginning to be put in place.⁴¹ In highly structured systems such as social benefits, licensing, personnel, and other administrative and operational systems, some of the necessary specifications that identify when and for how long a record is kept, trace when and by whom it was created and altered, establish the broader context or business processes surrounding the specific transaction, etc., are already inherent in the systems' design. They may not succeed at record-keeping as well as might be wished, but at least the tools and techniques for ensuring that records are captured and maintained are available.

The real challenge, however, resides in the office systems environment where structured approaches to designing and maintaining automated work processes have yet to be established. The guides mentioned in note forty-one address mostly the short term where record-keeping has yet to be integrated into the design of automated work processes. For instance, in the office systems environment, although users exchange e-mail and documents of all kinds, work flows such as the processing of executive correspondence, the preparation of responses to questions in the House of Commons, or the development of policies, and the record- or evidence-keeping systems have only rarely been fully automated. But in the next few years (and sometimes even now), we will have entered this new phase.

While technologies currently help us to become more productive as individuals (the "personal" computer), in the near future they will be used as tools enhancing directly the overall productivity of organizations and, if well designed, long-term information needs.⁴² When they evolve to the point where they are used to automate work processes, decisions regarding what records to keep and which ones to destroy will be made much more easily (i.e., because the decisions will have been arrived at in the context of the work process). Records will be kept automatically. There will be no need to keep a paper version. The capture of records will be automatic and completely transparent to users because the record-keeping rules will have been built into the design of the automated processes. Records will only be held for as long as they are needed to meet business and accountability requirements, and then will be disposed of, again automatically.

A Vision for the Future

*“National heritage emerges from linkages (and rivalries)
among all the identities that inhabit us.”*

D. Lowenthal

In relation to this need to reflect record-keeping in automated work processes and in partnership with other government institutions, the National Archives, in cooperation with the Treasury Board, has articulated a vision of the electronic work environment (which is based on the automation of work processes) and a vision of record-keeping in the electronic work environment.⁴³ Both of these documents are available from the National Archives and form part of the overall package of guidance that we have just released to government institutions.

This is the vision that we are developing at the National Archives for the federal government: to help organizations incorporate record-keeping requirements into the design of increasingly automated work processes and help in the development of the community of people that will be needed to make record-keeping happen in a way that is truly a part of the work process, in line with the business and accountability requirements of the organization and designed in such a way that it is unobtrusive or transparent to the user. By extension, we also need to develop functional requirements which can be meshed into the next generation of software that will enable work process redesign and automation. This would avoid the growing pitfall of the users' present anarchical retention or disposal practices, which are based on whims or intuition, on personal needs or interests. But for this to become a reality, even with the initiatives now in progress, it is necessary to field the people with the appropriate skills and knowledge required to accomplish the task--most certainly, people with multidisciplinary skills or people able to link with specialists of numerous disciplines. This will be vital if tomorrow's automated business processes and information networks are to keep an organized and rational memory.⁴⁴

In the complex world that I have just described, it is far from evident that records managers, librarians, documentalists, archivists, and other information managers possess the adequate theoretical and practical tools to solve in isolation or in cooperation the record-keeping challenges that this world presents.⁴⁵ In this new context, there is a growing risk that the professions will indulge in turf wars rather than combine their complementary knowledge and seek joint solutions to establish the direction that will help all of us evolve into a more ordered information world.⁴⁶

This is not to say that no evolution is occurring. For instance, universities themselves are more and more conscious of the present crisis. Some of them are even reshaping or starting programmes with a wider basis to train information specialists more at ease in our complex world.⁴⁷ Other programmes, such as those dedicated to the audit profession, the security community, the legal profession, computer science, and the business administration and public administration communities (i.e., those concerned about the keeping of records and evidence), also need reforms and these will emerge only if information specialists in general and archivists in particular can build alliances that draw on the strengths that they have to offer.

In the marketplace itself, smaller administrations and now, in government and business, larger ones too do not hire (or hire fewer and fewer) specialists for each task (one archivist, one records manager, one documentalist, one librarian, and so on). Rather, they ask one person or a small team to take charge of the whole information universe under their jurisdiction.⁴⁸ Such multi-disciplinary teams will comprise professionals who can bring their individual skills and knowledge together to a common purpose. Thus, it is not surprising that such pressures have brought professional associations together to define training needs, as can be seen in the Alliance of Libraries, Archives and Records Management's (ALARM) report mentioned in note four.

There is no doubt in my mind that separate programmes (both in institutions and in universities where more linkages will probably materialize over the next few years) will continue to exist as far as archives and libraries (and most others) are concerned, at least for the foreseeable future. Besides the existing documentation, new documents will continue to proliferate on traditional supports (manuscripts, photographs, maps, films, audio recordings, and so on) and to correspond to the traditional definition of "archival" or "library" material. The fundamental purposes or functions of the professions have not disappeared. Archival repositories will have to continue to reduce their unprocessed backlogs or to modernize existing descriptions according to the *Rules for Archival Description (RAD)*, for instance. Libraries will still deal with "published" documents. Thus the need for two distinct programmes which can be schematized by the existence of the National Archives and the National Library of Canada.

Yet, since the fundamental missions or functions of these two types of institutions are to gather, preserve, and make available information, recorded or published, albeit in different ways and for different purposes,⁴⁹ including historical memory, and since they have links with other heritage, cultural, and scientific institutions (museums, research establishments, or universities for instance), and numerous other professions (such as records managers, systems analysts, documentalists, lawyers, managers, and auditors), there is an enormous potential for synergy and creativity in a greater partnership between them and among the professions involved. The main beneficiaries, of course, would be the clients, without whom we would not exist.

Tomorrow's archives bearing on our time will probably be composed essentially of electronic records generated by larger databanks and, in the office systems environment, by increasingly automated work processes. The diffusion of information on archival holdings and of a larger and larger number of records will also occur mostly through electronic means (electronic highways and networks, CD-ROMs). The future, for all media, will be in automation. Thus, archivists must position themselves to encompass in their realm of activity not only the preservation of electronic records produced by their parent organizations or in their fields of acquisition, but also electronic diffusion. This by itself requires partnerships: with users, with systems producers and analysts, with computer companies, with librarians, records managers, and other associated professionals, even with museums, both national and local.⁵⁰

To understand the need for this cooperation, one can posit that at least three dimensions characterize the understanding and control of all types of information (published, archival, data, etc.):

- 1) Information is created or captured in a specific context (although this may sometimes be less apparent with electronic records).
- 2) Information is processed, described, preserved, protected, or destroyed, ideally at the proper time and according to existing laws, regulations, schedules, or other criteria (e.g., outdated publications in libraries).
- 3) Information is made available or distributed to users.

In the past, heritage and cultural institutions have tended to develop “proprietary” approaches, limited to their own programmes and their own channels of diffusion. The time has arrived when we should develop a post-custodial vision that overrides institutional ownership and moves away from established structures towards virtual archives, virtual libraries, virtual museums,⁵¹ or even virtual heritage statements or “templates” synthesizing resources from all of those. Canadians—and governments—would be able to gain access to the best information available without having to zigzag through the maze of institutional and professional jurisdictions. We are moving towards the situation where the public should be able to reach government services, for instance, without having to jump from one department to another. There should not be twelve or twenty kiosks in the supermarket, one for each department or institution; there should only be one. Similarly, the public, at a kiosk or from their computer or TV screen at home, should not have to skip from the archives service to the library service and then to the museum service to gather the information that they want. Although they need to understand its context, they don’t care where the information comes from and they want one point (rather than multiple points) of entry to get it.

In the three-dimensional information universe mentioned in the preceding paragraphs, archivists would contribute to identifying essential records in relation to their context (i.e., to their provenance). On the other hand, the preservation, the storage, and the diffusion of part of them, as well as many outreach activities, could be improved through partnerships among archives and other professions, institutions, and agencies. Even physical custody would not have to be in a single place. Is a beautiful documentary art item the property of the National Archives, or of the National Gallery, or rather of the Canadian people?

The proposed partnership would be based on the assumption that the use of information leads to the production of knowledge and of actions materializing in the form of books, reports, programmes, and human transactions, which in turn will be traceable according to their nature in archives or libraries. In this context, the essential role of archivists is to ensure that from the mass of information produced by parent organizations, groups, or individuals, a sufficient and coherent corpus of the most important records be identified and preserved in context for the long-term as elements of proof necessary for accountability, for continuity in administration, operations, actions, and transactions, and for the enrichment of the collective memory. This corpus will serve governments, administrations, and Canadians in general. On the other hand, other institutions are better positioned in certain cases to maintain custody (for instance, Statistics Canada and Environment Canada) or to diffuse the accumulated data and information holdings, perhaps even specific archival records and the related contextual information.

In fact, instead of “making our day” with problems, we should also recognize the opportunities. For instance, in government--but also in businesses and universities--many officials recognize the possibilities presented by the new technologies for the diffusion of information, data, and records in a transparent, homogeneous, and seamless context, without paper. However, there is often a lack of leadership to exploit this opportunity or the efforts are too scattered. A greater interdependency between interacting professions and institutions in the field of information management, in particular between archivists and librarians, could serve as a catalyst for this leadership through the combination of functions, activities, theoretical tools, and techniques.

In this approach, the whole is greater than the sum of the parts, but only if the parts (i.e., the theory, knowledge, etc., that each has to offer) are willingly brought together. On the one hand, the proposed partnership would have a catalytic impact on the institutions and on the professions involved in relation to the new world unfolding in front of our eyes. On the other hand, this coalition would be sufficiently important to generate programmes, activities, and tools, the impact of which would be so much more powerful to resolve the needs of government and of society than if this were a simple addition or if the present separation of walls were maintained.

What is true of the linkages between libraries and archives applies as well to many other communities with whom archives must interact.⁵² In fact, some of them have a much greater concern about recordness (content, context, and structure), the survivability of records through time, etc., than do librarians. Illustrations of this might be the interests of central agencies, auditors, or judges and lawyers in property rights (of Indians or Japanese internees, for instance), contaminated blood issues, or environmental degradation.

Thus, close partnerships between archivists (as well as records managers and others) and librarians seem urgently needed and very promising. Archivists excel in establishing context (i.e., relating any kind of information to the action that created it and providing information on the records themselves),⁵³ in appraising records, in disposing of them through schedules, in describing records and ensuring access in the context of laws such as access to information and privacy legislation, in defining specifications to embed in automated systems in order that decision-makers can gather all the needed information at the right moment, and preserve and ensure access to the records.

Librarians, on the other hand, are extremely adept at using new technologies, at employing standards, at ensuring selection (although in a client-driven approach, unlike archives, requiring different analytical and intellectual skills), at accessing and retrieving information (including the information in records), at disseminating information or information on information (metadata),⁵⁴ at managing large databanks, at interconnecting with the numerous existing library and other networks, and at developing thesauri and specialized bibliographies. Librarians and archivists are not just “technicians.” They have developed intellectual processes that, taken together and refined, could encompass the main issues I have raised earlier.

But one should not forget either that other strengths thrive in other areas (for instance, the auditors who understand what it means to be held accountable for what one does in an organizational context) to which archivists should turn in order to

further their own goals and to contribute to the broader world of information management. Today, moreover, decision-makers are aiming at creating single-window access and both they and the public do not make distinctions between records and information. For them, finding the record, the book, the video, the data, is to find the needed information, in whatever form it exists; thus there is a need to create this synergy among all the stakeholders in the field of information management so as to equip managers and clients in general with the capacity to navigate through the different sources of information, from data and raw information to archival records or published documents, without stopping to ponder on the grey areas, which are becoming wider and wider. Moreover, one should not forget that the emerging master of the information is the individual in front of the screen. These users too must be educated and sensitized, for without their help a formidable mass of information will never be preserved or made available.

Beyond questions such as the search for economies of scale, governments, businesses, and administrations of all kinds must integrate their efforts in the field of information management. Thus the emergence of a vision: an enhanced information service to the government and to the public. This vision cannot be implemented without a growing synergy between archival and library institutions and professionals, as well as with other related partners, as the way of the future. It would create a specific focal point for information management, a consortium of institutions and professions, the mandate of which relates to information management: classification, appraisal, disposition, description, preservation, and diffusion. This vision also implies equal access to government information for all Canadians, wherever they live, day or night, from the home or the work place.

For instance, in the federal government, such a consortium could become the partner of the Treasury Board for all information management. It could even assume the leadership in initiatives such as *Infosource*. In advising the government on the need to preserve its corporate memory and in appraising records so as to allow the National Archivist to authorize the destruction of those possessing no enduring value, the National Archives has developed a detailed knowledge of the structures, functions, programmes, and activities of the government. Because of the possibility of recycling this information into a locator system of government information, the National Archives could serve as the lead agency for contributing to a revitalized *Infosource*. The National Library, however, could exert its leadership in providing sophisticated navigational tools to help people search through *Infosource*. Thus the creation of a partnership between the two institutions that could lead to

a much more thorough and accurate type of *Infosource* — a descriptive hub [...] a kind of metadata to all government information (records and publications) retrievable by organizational name(s), by legislative mandates and functions, and by record system description for records/archives or by author/title/series, etc., for publications.⁵⁵

This would be a concrete Government Information Locator System (GILS), as this new “breed” is surging in the United States and as its counterparts are just beginning to emerge in Canada. GILS would serve not only citizens and governments, businesses and interest groups. Its role would also bolster the cultural and heritage mission of the institutions concerned. The idea of a locator system is being pursued by

the National Library and could benefit from the function-activity approach that archivists practice. A similar role can be played by archivists at other levels in society.⁵⁶

Of course, this direction implies that there would be some changes in the professional practices and in the relations between the institutions concerned. Records managers, librarians, and archivists, but others, too, must be prepared and trained for such a partnership so as to insert their specific expertise in the wider information realm. In order to work together and assume a leadership role, archives and libraries, for instance, are going to need people who are endowed with the necessary skills and knowledge. This issue is essential. In the area of electronic records, the greatest problem that we face is finding people who can advise industry, organizations, and government departments on the management of electronic records. In federal departments themselves, our traditional allies, the records managers, have demonstrated that they often lack the skills and knowledge to resolve the new issues. Other groups may be better positioned, but they also lack the skills and knowledge required to ensure that record-keeping is properly addressed in their organizations in a modern context. There is a real need to develop strategies in this area. If there is one thing that our disciplines (archives, libraries, etc.) could do, it would be to develop education and training strategies based on a clear identification of the skills and knowledge required to be in the information business. Although there will never be a singular list of skills and knowledge requirements, the process of developing strategies in this area would require the disciplines to come together to define what it is that they should be doing together. At the national level, such a process has already been launched by the ALARM initiative.⁵⁷

If the challenge is successfully met,

Cost savings, opportunity gains and risk reductions could be achieved if the disciplines would rediscover their principles, update and adapt their tools and techniques and blend them together into a complementary whole that would result in benefits that would be far greater than if they proceeded on their own. For instance, while librarians could concentrate on developing flexible and relevant **access** and **retrieval** strategies across all domains, records managers and archivists could extend their knowledge of what it means to keep records (i.e. provide **context**) to help other communities (e.g. librarians, data managers, etc.) ensure that when [primary source] information is provided to users, it can be understood in terms of the activities and circumstances (i.e., context) that gave rise to its existence.⁵⁸

Archivists and librarians must assume the leadership of the implementation of this vision. As an example, in the federal government, the National Archives has already gone further than its traditional role in records management to take the leadership in the preservation of records, in particular of electronic records. A joint effort by the National Archives and the National Library that would facilitate the management of all government information in whatever form or format, published or not, (a) would break the barriers between records managers, archivists, librarians, documentalists, and the like to maximize their combined expertise; (b) would ensure a better understanding of the words “information,” “documents,” “records,” and “data” in the larger context of information management; (c) would facilitate the re-engineering of fed-

eral programmes in the field of libraries and records management and, more generally, of information technology and management; and (d) would allow the National Archives and National Library to succeed in part of their main programmes in a more economic and efficacious fashion.

I must underscore again, however, the words *partnership* and *consortium*, for there will always be a need for library and archival programmes, separate, yet better connected. But at the same time, one cannot deny that technological changes are having an increasing effect on the traditional roles of records managers, librarians, archivists, and other related professions, with some blurring of the traditional lines of responsibility among at least some of these groups. The functions have to be accomplished, although the professional cadres have and will evolve through time. Our limited identities may well blend in the twenty-first century, into a cross-professional identity--strengthening the part while greatly enhancing the whole of the new, collective identity.

Conclusion

Many changes have unfurled and are accelerating in the field of information management in general and archives in particular. They are fuelled by the technological revolution, but also by the new ethos of good governance, informed citizenry, and the needs of decision-makers and individuals to gain quick access to required information for the conduct of their affairs. There is no doubt also that in the era of globalization and international mass culture, nations, minorities, cultural groups, and individuals are groping for some sense of identity by grasping at the roots that have nourished their evolution through time. They need to understand themselves and to reinforce their own "being" to be able to profit from and be enriching in their relationships with other communities. They also aim at sharpening their view of the values, symbols, and characteristics of their own culture so as to communicate better without losing their identities.

This global context can act as an analogy for archivists' role and necessary interactions with other professions. It reinforces the creative tension and complementarity between the administrative function of archives and archivists, as keepers of evidence and information for the business needs of their parent organizations, and their ultimate and essential cultural role of long-term memory, identity, and values formation and transmission. This totality or the combination of these missions, linked through the concept of memory, is greater than the sum of the parts. In fact, removal of one of those missions could lead to the collapse of the rest. And the bonding of all these archival approaches has become more crucial at this time as we move into the complex world of shifting nationhood, evolving governance, mutating organizations, and changing forms of records.⁵⁹ As a matter of fact, older records, considered "dead" or "dormant" memory, not only provide historical information, but are "resurrected" to become quite active again and linked to the business of an organization (for instance, the old land treaties with First Nations or records of the wartime relocation of Japanese Canadians).⁶⁰

The issues I have evoked are pervasive the world over, particularly in technologically advanced countries, and will become more so as time goes by. Archival theo-

rists, educators, and professional associations are rethinking some of their more traditional conceptual frameworks or are trying to regenerate their practices in digging deeper to their theoretical roots. The role--and identity--of the archivist at the turn of the twenty-first century should not be one of defining and defending a professional identity against all comers. It will be more an attitude of professional and technological convergence than rigid doctrinaire formulations. Our adjusted identity will emerge rather than be articulated from alliances and partnerships born of necessity as much as of principle. Such partnerships may involve sacrificing some of our traditional "protected turf" in order to safeguard the essential core of what we do best in society--appraise, describe, and provide evidence in context, thereby nurturing a local, national, and international memory of society and of the world.⁶¹

As societies moved from stone and clay tablets to papyrus and paper, thus from one form of recording technology to another, they must at times have experienced acute anxiety. The anguish is no different today. But rather than bending to discouragement, we should recognize these later changes as only another in a series of phases in a long evolution that stretches back many thousands of years. And, above all, we should be facing these transformations with confidence because inherent in each of us are the skills and knowledge that will empower us to learn more and to adapt to the changes so as to manage and shape them as well.

Charles Dollar has written:

Archival science provides the conceptual basis for understanding the fundamental issues that information technologies pose....archivists are asking the right questions and are developing the knowledge and tools to deal with information technologies....We will be concentrating on archival fundamentals about the context and meaning of documents as the light and knowledge of archival science is understood and appreciated by all users of electronic information.⁶²

But to face the enormous challenges ahead, we must combine professional, managerial, and organizational techniques with the world of ideas, dreams, creativity, knowledge, flexibility, and humanity.

Notes

- * The present article is a revised version of the keynote address presented at the ACA Conference in Regina, on 15 June 1995. Thanks go to colleagues from ACA, AAQ, and the National Archives of Canada who, over the years, have suggested, in one way or another, most of the ideas in this text. A special mention must be made of a group present at a brainstorming session at the NAC, in the summer of 1994, and of some of them who provided many suggestions, notably Terry Cook, Elizabeth Hawkins, John McDonald, Lee McDonald, and Chris Seifried. Any error in the present text is, of course, the author's alone.
- 1 See J. Maurice S. Careless, "Limited Identities," *Canadian Historical Review* 50 (March 1969), pp. 1-10; R.D. Cowen, "New World Colonization and Old World Loyalties," mimeo, November 1969; Gilles Paquet and Jean-Pierre Wallot, "Nouvelle-France /Québec/Canada: A World of Limited Identities," in Nicholas Canny and Anthony Pagden, eds., *Colonial Identity in the Atlantic World, 1500-1800* (Princeton, 1989), pp. 95-114.
- 2 Historians have experienced somewhat this evolution with the growth of interdisciplinary studies in some fields of research. But this gradual shift in no way approximates the wild tornado archivists must ride with the bloom of the information age. In fact, archivists have to jump faster and farther than their historian cousins and clients who don't know yet, for the most part, the dramatic changes occurring in the shaping of a memory of the present for the future. See Jean-Pierre Wallot, "Building a Living Memory for the History of Our Present: New Perspectives on Archival Appraisal," *Journal of the Ca-*

- nadian Historical Association* 2 (1991), pp. 263-82. "...archives and records management and information management and technology programmes and professionals will increasingly be influenced by workplace changes over which they will have little control but with which they will have to carry out their mandates." (Richard E. Barry, "The Changing Workplace and the Nature of the Record," paper presented at the ACA Annual Conference, June 1995, p.1.)
- 3 Tom Nesmith, "Archival Studies in English-Speaking Canada and the North American Rediscovery of Provenance," introduction to T. Nesmith, ed., *Canadian Archival Studies and the Rediscovery of Provenance* (Metuchen, 1993).
 - 4 For instance, the Alliance of Libraries, Archives and Records Management (ALARM) has published an interim report entitled *Towards a Strategy for Human Resource Development in Libraries, Archives and Records Management* in December 1994. See also Cynthia J. Durance and Hugh A. Taylor, "Wisdom, Knowledge, Information and Data," *Alexandria* 4, no. 1 (1992), pp. 37-61; Hugh Taylor, "'My Very Acts and Deeds': Some Reflections on the Role of Textual Records in the Conduct of Affairs," *American Archivist* 51 (Fall 1988), pp. 456-69, and Hugh Taylor, "Transformation in the Archives: Technological Adjustment or Paradigm Shift," *Archivaria* 25 (Winter 1987-88), pp. 12-25; David Bearman and Margaret Hedstrom, "Reinventing Archives for Electronic Records: Alternative Service Delivery Options," in Margaret Hedstrom, ed., *Electronic Records Management Program Strategies, Archives and Museum Informatics Technical Report* 18 (Pittsburgh, 1993), pp. 82-98; Terry Cook, "Electronic Records, Paper Minds: The Revolution in Information Management and Archives in the Post-Custodial and Post-Modernist era," *Archives and Manuscripts* 22, no. 2 (November 1994), pp. 300-28; Jacques Grimard, "Mémoire et archives: le choix des témoignages," in Musée de la civilisation, ed., *Actes du Séminaire l'objet contemporain* (Québec, 1994), pp. 59-70.
 - 5 Archives already come behind museums and libraries in budgetary support and public use. At the same time, the world seems unable to learn from archives and thus repeats its tragedies.
 - 6 Treasury Board Secretariat, *Blueprint for Renewing Government Services Using Information Technology* (Ottawa, 1994). The emphasis is put on "direct service to clients," "transparent and seamless service," "value-added service," "continuous learning," "shared information," "paperless environment," and so on.
 - 7 In the Act, the word "record" in English ("document" in French) "includes any correspondence, memorandum, book, plan, map, drawing, diagram, pictorial or graphic work, photograph, film, microform, sound recording, videotape, machine readable record, and any other..." (art.2), with the exception of "library and museum materials" (art.7).
 - 8 Carol Couture, *L'évaluation des archives. État de la question et aspects théoriques*, Mémoire de DES en études supérieures spécialisées en archivistique (Université de Haute Alsace, 1995), p. 61.
 - 9 This concept has fuelled a wide body of literature in the last few years. For instance, see: Cynthia J. Durance and Hugh Taylor, "Wisdom"; David Bearman and Richard Lytle, "The Power of the Principle of Provenance," *Archivaria* 21 (Winter 1985-86), pp. 14-27; Tom Nesmith, "Archival Studies in English-Speaking Canada"; Terry Cook, "The Concept of the Archival Fonds: Theory, Description, and Provenance in the Post-Custodial Era," in Terry Eastwood, ed., *The Archival Fonds: From Theory to Practice* (Ottawa, 1992), pp. 31-86, esp. 47-52; Jean-Pierre Wallot, "Free Trade in Archival Ideas: The Canadian Perspective on North American Archival Development," *American Archivist* 57 (Spring 1994), pp. 380-99; Luciana Duranti, "The Concept of Appraisal and Archival Theory," *American Archivist* 57 (Spring 1994), pp. 328-44. "An archives," explains Terry Eastwood, "consists of a complex whole the parts of which are interdependent, no one document having its full meaning if it is abstracted from its relationships with other documents established by the facts of creation." Thus, "an archival document can only be understood in the context of its initial purpose." ("Towards a Social Theory of Appraisal," in Barbara L. Craig, ed., *The Archival Imagination. Essays in Honour of Hugh A. Taylor* (Ottawa, 1992), pp. 77, 72, 71-89.). See also Carol Couture, *L'évaluation des archives*, passim.
 - 10 As we shall see in more detail later, because of the knowledge thus accumulated, the National Archives, for instance, could greatly increase access to government information by the public through the development and maintenance of a register of governmental information identifying the structures, mandates, activities, transactions and official documents, both past and present, as well as their location. A similar role may be played by other repositories for their stakeholders and their clients. As for a good classification of "values" ("primary," "secondary," "evidential," "informational," and so on), see Carol Couture, *L'évaluation des archives*, p. 57ff.
 - 11 See Ian E. Wilson, "Reflections on Archival Methods and Strategies," paper delivered at the annual conference of the Society of American Archivists, Indianapolis, 8 September 1994, to be published. The records of governments feature bureaucrats and politicians talking to each other; the records of "governance" include that facet, but also the vital impact of the State on the citizen and of the citizen on

- the State. See Terry Cook, *The Archival Appraisal of Records Containing Personal Information: A RAMP Study with Guidelines* (Paris, 1991).
- 12 F. Gerald Ham, "The Archival Edge," in Maygene F. Daniels and Timothy Walch, eds., *A Modern Archives Reader* (Washington, 1984), pp. 328-29; Terry Cook, "Viewing the World Upside Down: Reflections on the Theoretical Underpinnings of Archival Public Programming," *Archivaria* 31 (Winter 1990-91), pp. 123-134; Jean-Pierre Wallot, "Free Trade in Archival Ideas," pp. 380-99.
 - 13 Cynthia J. Durance and Hugh Taylor, "Wisdom," p. 44.
 - 14 The National Library can also sell library material, negotiate agreements in Canada and with foreign countries for the exchange of documents, and provide professional consultation and advisory services.
 - 15 The word "book" in English ("document" in French) "means library matter of every kind, nature and description and includes any document, paper, record, tape or other thing published by a publisher, on or in which information is written, recorded, stored, or reproduced" (art.2).
 - 16 Context, in the primary sources, contains much of evidential value. In the secondary sources, "context" is embodied in footnotes, references, citations, and any other types of references to previous work in the field (i.e., in scientific and technical materials) or other background materials (such as is found in biographies and academic monographs). This latter "context," which is part of the content of the "book," is probably less at risk, particularly in documents existing in electronic form, than the context in relation to original or primary sources (i.e., the archival context). Thus, there is a significant difference in context, both from the point of view of the creation of information and the requirements of clients, in the use of primary sources and that of secondary sources. (This note has been inspired by comments from Elizabeth Hawkins, 18 September 1995.)
 - 17 At least some rationalization is occurring. For instance, the National Archives has decided to transfer its Canadiana and research collections to the National Library, retaining only needed works for its business. Where some imprints are linked to fonds, the descriptions in the National Library system will mention the provenance.
 - 18 This ethos is shaping the policies of international development agencies or bodies such as UNESCO or, in Canada, International Development Research Centre (IDRC) and Canadian International Development Agency (CIDA). The interest for preserving information as cultural heritage has shifted to building a needed information infrastructure and a memory for sound decision-making, business continuity and coherence, scientific, educational, technical, and economic progress, accountability, and democratic behaviour (see for instance Ronald Archer, "Archives and Records Management: An IDRC 25 Year Retrospective of Support," paper presented at the Inter-regional Conference on Archival Development, Tunis, May 1995, to be published in *Janus*, in 1996). "Information is essential for a democracy to survive, for a free market to thrive, and for realizing the potential of a nation's citizens and culture" (Louis Forget, "Libraries and the Information Highway," mimeo, Ottawa, 1995, p. 3). "Constructive participation and the development of democracy depend on satisfactory education as well as on free and unlimited access to knowledge, thought, culture and information" (Unesco Public Library Manifesto," [Paris, 1994]).
 - 19 For instance, in Canada, UBI from Videotron/Videoway, SIRIUS from Stentor Telecom Canada, CANARIE from Canarie Inc., SCHOOLNET, and, of course, the internet.
 - 20 Thus, the on-going efforts to develop "spiders" to navigate through the internet's indexes (Louis Forget, "Libraries and the Information Highway," p. 2).
 - 21 Jacques Grimard, "Mémoire et archives: le choix des témoignages," in Musée de la civilisation, ed., *Actes du séminaire l'objet contemporain* (Québec, 1994), pp. 59-70.
 - 22 One can find an interesting approach in Jean-Stéphen Piché, "Macro-Appraisal and Duplication of Information: Federal Real Property Management Records," *Archivaria* 39 (Spring 1995), pp. 39-50. For a theoretical overview, see Angelika Menne-Haritz, "Appraisal or Documentation: Can We Appraise Archives by Selecting Content?" *American Archivist* 57 (Summer 1994), pp. 528-42.
 - 23 For a clear distinction between "simple," "compound," and "complex" documents, as well as examples of these, see Richard E. Barry, "The Changing Workplace," pp. 12ff.
 - 24 This point has been raised by Elizabeth Hawkins, from the NAC, in a private communication, June 1995.
 - 25 Garth Graham, Cornelius F. Burk, and Henry E. McCandless, "Governance and Information: Myths, Realities and the Future," *Canadian Parliamentary Review* (Winter 1994), pp. 1-6.
 - 26 Such as papers, organizational reports, policy and procedural manuals, precedent-case histories, and research reports.
 - 27 Cynthia Durance and Hugh Taylor have called this phenomenon "hot links," (see "Wisdom," p. 54).
 - 28 Society would be evolving towards a more sophisticated version "of the holistic oral society...prevalent in the Middle Ages," *Ibid.*, p. 46.

- 29 The "it" is dependent on the business view. If the master version of the guide needs to be seen from an evidentiary point of view (i.e., it is needed to substantiate what has been approved), then it is a record. If it is an instrument to help in the dissemination of the information in the guide to a given set of clients (i.e., clients who do not care about the business process that generated the guide), then one could argue that it is also part of the publication process.
- 30 Such a view or perspective can be based on either a business view (disseminate a guideline to the workers who have to fix the wing of an F-18 fighter) or an accountability view (keeping a record of the master version of the guideline on fixing the wings of F-18 jets which, in association with other related records, documents how the guide was produced and who is to blame should a wing fall off the plane!).
- 31 Terry Cook, "Easy to Byte, Harder to Chew: The Second Generation of Electronic Records Archives," *Archivaria* 33 (Winter 1991-92), pp. 210ff.
- 32 Terry Cook, "It's 10 O'Clock - Do You Know Where Your Data Are?" *Technology Review* 53 (January 1995), pp. 49-53.
- 33 On electronic records, apart from references in note four, see Margaret Hedstrom, "Understanding Electronic Incunabula: A Framework for Research on Electronic Records," *American Archivist* (Summer 1991), pp. 334-54; David Bearman, "Multisensory Data and Its Management," in Cynthia Durance, ed., *Management of Recorded Information. Converging Disciplines* (Munich, 1989), pp. 111-20; R.E.F. Weissman, "Virtual Documents on an Electronic Desktop: Hypermedia, Emerging Computer Environments and the Future of Information Management," *Ibid.*, pp. 37-57; C. Grandstrom, "The Evolution of Tools and Techniques for the Management of Machine-Readable Data," *Ibid.*, pp. 92-101; *Taking a Byte out of History: The Archival Preservation of Federal Computer Records* (Washington, 1990); Sue Gavrel, *Conceptual Problems Posed by Electronic Records: A RAMP Study* (Paris, April 1990); many chapters in David Bearman, ed., *Archival Management of Electronic Records* (Pittsburg, 1991), and his more recent *Electronic Evidence: Strategies for Managing Records in Contemporary Organizations* (Pittsburgh, 1994); John McDonald, "Records Management and Data Management: Closing the Gap," *Records Management Journal* 1 (1989), pp. 4-11; John McDonald, "Information Management and Office Systems Advancement," in Angelika Menne-Haritz, ed., *Information Handling in Offices and Archives* (New York, 1993); John McDonald, "Managing Records in the Modern Office: The Experience of the National Archives of Canada," in Stephen Yorke, ed., *Playing for Keeps: Proceedings of the Electronic Records Management Conference, Canberra, Australia* (Canberra, 1995), pp. 84-92; *Idem.*, "Archives and Cooperation in the Information Age," *Archivaria* 35 (Spring 1993), pp. 110-18; *Idem.*, "Data and Document Interchange Standards: A View from the National Archives of Canada," in Steven M. Spivak and Keith A. Winsell, eds., *A Sourcebook on Standards Information* (Boston, 1991); *Idem.*, "Managing Records in the Modern Office: Taming the Wild Frontier," *Archivaria* 39 (Spring 1995), pp. 70-79; Terry Cook, "Easy to Byte, Harder to Chew" and "Electronic Records, Paper Minds"; *Idem.*, "It's 10 O'Clock"; *Idem.*, "Leaving Archival Electronic Records in Institutions: Policy and Monitoring Arrangements at the National Archives of Canada," *Archives and Museum Informatics* 9, no. 2 (1995), pp. 141-49; Cynthia Durance and Hugh Taylor, "Wisdom"; Jean-Pierre Wallot, "Free Trade in Archival Ideas"; Darryll R. Prescott, "Today's Research in Information Storage and Retrieval: Can it Transport us into Tomorrow?" mimeo, paper to the Annual Conference of ACA, June 1995; Luciana Duranti, "Protecting Electronic Evidence: A Progress Report on a Research Study and its Methodology," mimeo, paper to the Annual Conference of ACA, June 1995.
- 34 Hans Rütiman, Presentation at the National Meeting of Canadian Preservation Specialists hosted by the National Library of Canada, 31 October and 2 November 1994, in Iris Winston, "Hans Rütiman: Preservation Ambassador," *National Library News* 27, no. 2, pp. 1, 5. Library conservation policies support this contention, as, sometimes, only the information needs to be retained, e.g., in the case of a microfilm. But often, the original must be preserved.
- 35 Thus the John Le Carré quote at the beginning of part I. For more development, see the references in note 33.
- 36 Richard E. Barry, "The Changing Workplace," p. 2; Judith Ellis, ed., *Keeping Archives* (Port Melbourne, 1993), p. 477.
- 37 See John McDonald, "Managing Records in the Modern Office"; also Jean-Pierre Wallot, "From Papyrus to Virtual Record: The Changing Nature of Communications," Keynote Address to the Symposium "Information, Technology and Electronic Communications: Working in a Changing World," Ottawa, 2 October 1995, mimeo, pp. 4ff.
- 38 To comply with the terms of the North American Free Trade Agreement (NAFTA), Canada was obliged to make amendments to its copyright law. One change was in the definition of "publication." The new definition means making copies of a work available to the public, in such a quantity as to satisfy the reasonable demands of the public, having regard to the nature of the work. This definition takes into

account, for example, materials that, while not for sale or for direct distribution, are nevertheless available to the public (i.e., a film in a theatre) (*An Act to Implement the North American Free Trade Agreement* which came into force on 1 January 1994, with the proclamation of Bill C-115).

- 39 This problem has become international. This is why UNESCO organized an experts' Conference on ethical and legal problems in the world of information highways in Paris, in early July 1995.
- 40 On the meaning of the terms, "reliable" and "authentic," see Luciana Duranti, "Reliability and Authenticity: The Concepts and Their Implications," *Archivaria* 39 (Spring 1995), pp. 5-10. On the different properties (impartiality, naturalness, interrelatedness, authenticity, and uniqueness), see her six-part series on "Diplomatics: New Uses for an Old Science," *Archivaria* 28 (Summer 1989) through 33 (Winter 1991-92).
- 41 For instance, the "Guideline on the Management of Electronic Records in the Electronic Work Environment," now being tested across the Government, other guides such as "Managing Computer Directories and Files" and "Managing Documents in Electronic Workspace," documents on managing "shared files and directories" and on "automated records management systems" (ARMS), the development of a set of "functional requirements" for use in the procurement of automated records management systems that manage both hard copy and electronic records—requirements already being used by some vendors. These documents are available and can be obtained through John McDonald's office at the NAC. For more details on this work in progress, see John McDonald, "Managing Records in the Modern Office" and Jean-Pierre Wallot, "From Papyrus to the Virtual Record," pp. 9ff.
- 42 For example, incredible as it seems, archivists and managers in Terry Cook's division dealing with the appraisal and disposition of records actually had to sit down with the president and programmers of a major software company to explain to them how to revise the next version of their software so that effective accountability and disposition would occur. The company readily agreed, but before the archivist's intervention, they simply had not thought about it. Needless to say, government departments were alarmed when they learned that the current version of the software did not have these capabilities. For an overview of the general evolution of the role of informatics in the creation and use of records, see Richard E. Barry, "The Changing Workplace," pp. 22-28, 31. "The information technology industry continues to support products aimed at individual productivity (word processors, spreadsheet systems). However, in the 1990s there has been a shift in the major areas of innovation toward tools aimed at improving workgroup effectiveness..." (Idem, "The Case for a Senior Information Management and Technology Position/Function in Government Archives and Records Management Offices for Electronic Records," mimeo, 1994, p. 1).
- 43 National Archives of Canada and Treasury Board Secretariat, *Electronic Work Environment: Vision* (Ottawa, 1994); National Archives of Canada, *A Vision of Record Keeping in the Electronic Work Environment* (Ottawa, 1995).
- 44 John McDonald, "Managing Records in the Modern Office," pp. 77ff, and "Managing Electronic Records in the Electronic Work Environment," briefing notes to the members of the Treasury Board Information Management Sub-Committee, March 1995. Inspired by those comments, I have written: "If record-keeping utilities are to move behind the screen, then institutions will need 'renaissance' records managers who understand what a record is, know what it means to keep records, are able to set the rules for record-keeping (on behalf of and with the approval of the organization), and are facilitators that help users carry out their responsibilities for record-keeping. Institutions will need records managers who understand the distinctions among "function," "activity," "programme," "process," "task," "transaction," and "action," who can express record-keeping requirements in the context of these terms and who can work well with technical specialists to ensure that these requirements are reflected in the design of automated business applications. Finally, we need records managers who can work well with those who are positioned to help users at all levels of the organizations access and retrieve the information that they need to do their job," ("From Papyrus to the Virtual Record," pp. 21ff). This need for convergence had already been well demonstrated in Cynthia Durance and Hugh Taylor, "Wisdom." Similar comments, with appropriate adjustments, may be made for librarians and others. Richard E. Barry has called for a more "open dialogue" between professional associations, institutions, and disciplines involved in information management ("The Changing Workplace," pp. 31ff).
- 45 Unfortunately, this question did not really emerge clearly at the 1995 ACA Conference, even at the Round Table on education. Yet it is vital and of great urgency.
- 46 On the international scene, the traditional rivalries between FID, IFLA, ICA, FIAT, FIAF, and others are grudgingly giving way to more cooperation and even some alliances, e.g., the FID's "Tokyo Resolution" of 1994 on the importance of information management in our world, which was co-signed by the most important international organizations involved in information management of one kind or another, including ICA. These organizations have also participated together in the UNESCO Task Force of experts on legal and technical issues raised by the "information highways," in the summer of 1995. Finally, ICA and IFLA cooperate closely on the "Memory of the World" UNESCO programme.

- 47 According to Barbara L. Craig's notes on the new University of Toronto programme in information sciences (published in the ACA's *Bulletin* 20, no. 1 [September 1995], pp. 12-15), a solid core of professional teaching, training, and researching will be complemented by more electives in neighbouring sciences: library, archives, information, even informatics sciences. There are rumours that discussions are being pursued at UBC to introduce some changes to the MAS. At Monash University, in Melbourne, Australia, the M.A. programme, developed in a library school setting, integrates records management and archival science. Many programmes in Canada and the United States are also a component of former library schools now schools of information science. It is interesting that as these developments occur, the *Globe and Mail* (11 May 1995) reported them, while commenting that the President of the University of Toronto Information Studies Alumni Association has become the "data architect" of Ontario Hydro, "deciding issues such as how to organize 16 million bits of information, from customer bills to internal company research papers."
- 48 As Cynthia Durance and Hugh Taylor have noted, the present trend is to hire "librarians to oversee the records management function," ("Wisdom," p. 41) for their skill at retrieving and diffusing information is well known, while archivists' skills in appraisal and establishing provenance remain more obscure. Richard E. Barry suggests that archivists should enhance their image, be and be seen as "purveyors" of documents, reviving the idea of "Remembrance" ("The Changing Workplace," p. 24).
- 49 Cynthia Durance and Hugh Taylor have well explained the similarities and differences in the library and archival approaches to information ("Wisdom," *Passim*).
- 50 Jacques Grimard has explained these links with the museum community ("Mémoire et archives"). More generally, in the Federal Government, the National Archives of Canada has to cooperate with the National Library of Canada, Canadian Institute for Scientific and Technical Information, Statistics Canada, the Canada Communication Group, Treasury Board, National Museums, and the Department of Canadian Heritage, to name but a few, and also a number of lead departments that recognize the value of records (and information generally) in support of their business and accountability requirements.
- 51 George MacDonald and Steven Alsford, "Towards the Virtual Museum," Keynote Address to the Annual Meeting of the American Association of State and Local History in Omaha, September 1994, published in *History News* 49 (September-October 1994), pp. 8-12. "Many Canadians never see Parliament, enjoy an afternoon in the National Gallery, or explore the written word in the National Library. These institutions are fundamental to the education and cohesiveness of Canadian society. The networked computer is the tool which allows us to become "virtual" institutions open to all Canadians, at all times..." (Louis Forget, "Libraries and the Information Highways," p. 2).
- 52 See Jacques Grimard, "Mémoires et archives."
- 53 "Accurate description gives users a tool to help them to understand the material that they are using. It creates a consciousness about the coherence of fragmented bits of information. It creates the potential to understand the value of facts and data as evidence, not as the disembodied stuff of confusion and alienation" (Lyv Mykland, "Protection and Integrity: The Archivist's Identity and Professionalism," *Archivum* 39 (1993), pp. 99-109, 102).
- 54 For recent contributions on metadata in archives, see Heather MacNeil, "Metadata Strategies and Archival Description: Comparing Apples to Oranges," *Archivaria* 39 (Spring 1995), pp. 22-32; Wendy Duff, "Will Metadata Replace Archival Description? A Commentary," *Ibid.*, pp. 33-38.
- 55 Personal communication from Terry Cook, 22 August 1994.
- 56 There is no reason to fear hegemonic intentions. Already, the National Archives, like many other archival repositories across the country, does not acquire large databanks of historical value. It describes them, identifies the data of permanent value, and signs agreements with the creating bodies to ensure their preservation through time and reasonable access by researchers in accordance with the laws of the land. Libraries are interested in describing the products of those systems.
- 57 This paragraph is inspired by a private communication by John McDonald, 22 August 1994. In the federal government, we will be looking at this issue (i.e., skills and knowledge required for record-keeping) in cooperation with Treasury Board, the Canadian Centre for Management Development, and selected government departments, all of whom are beginning to become concerned about the "people" dimension.
- 58 Personal communication from John McDonald, 22 August 1994. See also Charles Dollar, "Seizing the Opportunity: Archivists in the Information Age," *Archivum* 39 (1993), pp. 261-83. "There is a vast explosion of information taking place which should find the archivist, the librarian and the records manager working together in clear understanding of the value of their different applications to find their way out of the maelstrom. Perhaps, by working together in innovative, non-competitive and creative ways, we can distil the essential information out of the mountain of data with which we are faced and proceed, with luck, to preserve for future generations some glimmer of the accumulated knowledge and wisdom of current society" (Cynthia Durance and Hugh Taylor, "Wisdom," p. 57).

- 59 "The underlying meaning of 'recordness' is not changing in fundamental ways; however, the field of recordworthy documents is becoming much richer and more challenging with emerging multi-media and hypermedia 'documents' and the manner in which records are managed will have to change substantially" (Richard E. Barry, "The Changing Workplace," p. 30). I have elaborated elsewhere on the cultural role of archives and archivists ("Archival Oneness in the Midst of Diversity: A Personal Perspective," mimeo, Plenary Address for the International Archives Day at the Annual Conference of the Society of American Archivists, Washington, 2 September 1995). Because of their legal, evidential, and informational value, archives document events, actions, and transactions. They act as a revealer of culture and of the debates in society. They are an inexhaustible source of knowledge on the evolution of human groups and individuals. They are of special interest to educators and communicators called upon to explain and to transmit values and knowledge, as well as to support the quest for identity and scholarly research. Even with respect to the organization of the material life of people in society, archives play a leading role (land registers, architectural drawings and specifications, road or communication system development plans, name files generated by education and health systems, territorial agreements, to name but a few), facilitate an understanding of the decisions, actions, and transactions that have led to the carrying out of development plans and the organization of societal life. In this paper, I have dealt at length with the administrative, democratic government and governance, decision-making, and corporate memory issues.
- 60 See Carol Couture, *L'évaluation des archives*, pp. 53 ff.
- 61 "Muséologues, archivistes, bibliothécaires et autres documentalistes ont le devoir de travailler ensemble, de mettre en commun, si nécessaire, leurs pratiques pour assurer la création et la transmission d'un corpus testimonial vivant, signifiant et qui soit reflet de la démarche évolutive et cohérente de l'expérience humaine" (Jacques Grimard, "Mémoire et archives," p. 70).
- 62 Charles Dollar, "Seizing the Opportunity: Archivists in the Information Age," *Archivum* 39 (1993), pp. 454-55. While acknowledging that archivists need more knowledge and skills "in the areas of information technology, policy and management," Margaret L. Hedstrom is convinced that archivists "are experts in some of the key questions raised by new telecommunications technologies, such as authenticity and reliability, management of dynamic information resources, and navigation through unstructured information resources. Many of our basic principles map neatly to this new technological environment if we step back from the details of paper-based procedures and practices" (E-mail from Margaret L. Hedstrom to Michael Swift, 21 June 1995). She was commenting on another E-mail by Bruce Montgomery, dated 19 June, who was calling for an adjustment of curricula in archival science so as to face the "dramatic changes in communications and automated cataloguing."